

**HOW TO  
GET THE  
BEST OF**

# **BOTH WORLDS**

**F**ocusing on one thing means: not focusing on another. Our abundance of experience and the project management model 'The Devil's Triangle' teaches us that. When we talk about Personalized Manufacturing,

the focus is on delivering quality. Not so much in the sense of offering the best product, but in the sense of being the best in translating your customers demand into a good, functional product. Nice for your customers, but

how do you ensure that it also remains interesting for your organization? How do you offer customized engineering while maintaining a high pace in the development of your production lines? Can the two even go hand in hand?



**Choosing one = not choosing the other**

The basic rule is that you choose a primary and secondary focus between quality, price and (delivery) time. That means that you have to accept that you will have to compromise on one of those three pillars. In Personalized Manufacturing, the focus is on the 'quality' pillar. If you, as an organization

in technology, therefore opt for 'delivery time' as the second pillar, this automatically means that you are compromising on price. You then build quality products and ensure that delivery times are above average, knowing that there is a price tag attached to that. Choosing the 'price' pillar means that you will have to compromise on fast delivery times. Think about the influence this choice has on, for example, the

deployment of engineering capacity, urgent deliveries of mechanical parts, personnel costs, profit margins, overtime and delivery times.

**So, how do you get the best out of those three worlds?**

We notice that several of our clients are making a move towards modularization. It's a hot topic. A development that

**“ People think focus means saying yes to the thing you’ve got to focus on. But that’s not what it means at all. It means saying no to the hundred other good ideas that there are. You have to pick carefully. I’m actually as proud of the things we haven’t done as the things I have done. Innovation is saying no to 1,000 things.”**

**- Steve Jobs**





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# VAN ETO NAAR CTO

Welke uitdagingen kom je als engineer tegen in de transitie van Engineer to Order naar Configure to Order?

**Keynote speaker:**

Ass. Professor Tom Vaneker

**20 oktober 2022 | 13:00-17:00**

[www.tt-engineering.nl/Kennisevent-van-ETO-naar-CTO](http://www.tt-engineering.nl/Kennisevent-van-ETO-naar-CTO)

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is visible across the entire technical sector; whether you work in the automotive industry, food machinery, equipment construction or special machine construction. Although this is a method commonly used in Configure to Order, many organizations also use modularization to make the most of those three worlds. It is the golden mean between Personalized Manufacturing (Engineer to Order) and standardized products (Configure to Order).

What modularization actually does, is that it forces you to define to what extent you want to focus on the pillar 'quality'. In other words: to what extent do you want customers to be able to personalize designs? Modularizing production lines can help to continue to deliver custom engineering while taking efficient steps in the engineering and production process. In this way you optimize your delivery times, without incurring additional costs on a structural basis. Of course, the switch to modularization requires an investment. In the long run, however, it means savings in engineering costs.

### Does modularization offer enough room for custom engineering?

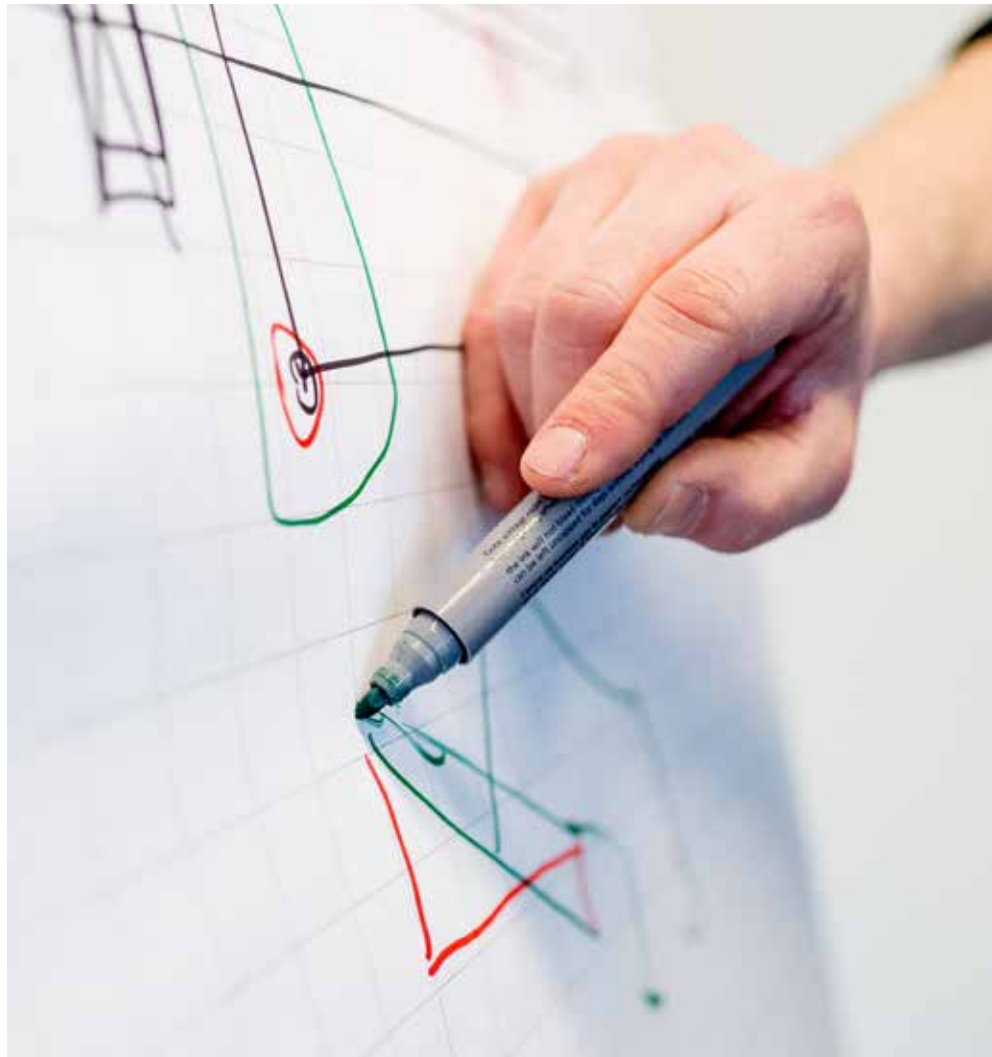
Personalized Manufacturing provides specific concept development and elaboration for each customer request. The focus lies in looking for the most effective solution for the customer's needs. Solutions are always unique and fully match the package of requirements and the wishes of a customer. This leaves room for a lot of attention for the effectiveness of the devised solution. At the same time, it also offers room for small mistakes that can sneak into the design process, due to the many revisions and adjustments.

Modularization gives you the opportunity to split and standardize production systems into various modules. This guarantees a large part of the quality and functionality of the engineering solution.

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**Modularly constructed production lines are therefore the future.**

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In addition, costs in the engineering and production process are reduced, without this being at the expense of the wide range of offered machines and equipment. Modules can be designed in such a way that they can be placed in different orders in a production line. A customer therefore already has options for personalization. Machines are also

designed transparently in this way. In addition, you can of course choose to make room for customer-specific engineering on the modules itself. By building the modules largely in a standardized and yet flexible way, there is more room for innovation. Something that is welcome in a rapidly changing market.

## Modularization: a basic requirement for Industry 4.0

In the past, the focus was on the net productivity of a line when purchasing machines and production lines. Nowadays customers are looking for machines and production lines that are flexible. Systems must be adaptable and machines must be variable and easy

to expand. Modularization is therefore seen by some as a basic requirement for Industry 4.0. In our dynamic industry, technological developments follow each other at a rapid pace. As a result, it is becoming increasingly important to be agile and to build machines flexibly. Modularly constructed production lines are therefore the future.

## What is the added value of an involved engineering partner?

Whether you focus on quality, price or delivery time: you will have to gather engineering partners around you who help build the future vision you have for your engineering department. Why is that important? If you work with a partner that focuses primarily on the fastest and most cost-effective delivery possible, handling an assignment quickly becomes a checklist. Task-oriented, putting out fires and moving on. Check, check and check. By failing to provide a sustainable implementation of the assignment, the involvement of engineers regarding the project and the long-term success of clients diminishes.

To be able to support your future vision, partners need to be aware of what you need. We call this 'deep customer knowledge'. Imagine having a partner in engineering who knows your engineering processes through and through. A partner who knows within which organizational frameworks you have room to work, play and innovate. And a partner who knows what will help you in the long and short term. Isn't that a nice way of working together in technology?



*Written by:*

Karen Mendes Visscher

Marketing & Communications advisor at TT-Engineering

## About TT-Engineering

Making development possible together is the goal of TT-Engineering. We are focused on finding the best solution, with a critical, goal-oriented, functional and solution-oriented view. We are an ambassador for collaboration in the manufacturing industry and believe that sharing knowledge is the basis for making the future possible. Together we advance in technology. ■